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APPLICATION NO.	1	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/698,263		10/30/2003	Magnus Karlsson	200311960-1	2952	
22879	7590	07/07/2006		EXAMINER		
		ARD COMPANY 04 E. HARMONY R	GOLDEN, JAMES R			
		OPERTY ADMINIS	ART UNIT	PAPER NUMBER		
FORT COLLINS, CO 80527-2400			2187			
				DATE MAILED: 07/07/2006	DATE MAILED: 07/07/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/698,263	KARLSSON ET AL.					
Office Action Summary	Examiner	Art Unit					
	James Golden	2187					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 06 Ap	<u>oril 2006</u> .						
2a)⊠ This action is FINAL . 2b)☐ This							
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)⊠ Claim(s) <u>15-27</u> is/are allowed.							
6)⊠ Claim(s) <u>1-14</u> is/are rejected.							
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers							
9) ☐ The specification is objected to by the Examine	г.						
10)⊠ The drawing(s) filed on <u>06 April 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary						
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Paper No(s)/Mail Da 5) Notice of Informal P	ate Patent Application (PTO-152)					
Paper No(s)/Mail Date	6) Other:	., , , , ,					

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DETAILED ACTION

Response to Amendment

The instant application 10/698263 has a total of 27 claims pending. There are 4 independent claims and 23 dependent claims. Claims 15-16 and 21-27 have been allowed; claims 17-20 are in now condition for allowance; claims 1-14 are rejected under statutory basis.

Drawings

1. The corrections to the references to drawings received on April 6, 2006 are accepted by the examiner, and the objections are withdrawn.

Specification

- 2. The applicant's arguments regarding the requested change in title received on April 6, 2006 are accepted, and the objection is withdrawn.
- 3. The corrections to the specification received on April 6, 2006 are accepted by the examiner, and the objections are withdrawn.

Claim Objections

4. The corrections to the claims received on April 6, 2006 are accepted by the examiner, and the objections are withdrawn.

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Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 6. Claims 1-14 are rejected under 35 U.S.C. 101 because the claimed invention is an abstract method and therefore the claims are directed to non-statutory subject matter.
- 7. Claims 1 and 8 are directed to a computer-implemented method of manipulating a mathematical algorithm to solve equations rather than a practical application of the algorithm. No tangible result appears to occur from completing the recited method steps. Claims 2-7 and 9-14 do not appear to produce a tangible result, but instead describe the intent of the solution. In order for these claims to be statutory, a tangible result must be present.

Allowable Subject Matter

- Claims 15-27 are allowed.
- 9. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).
- 10. The following is a statement of reasons for the indication of allowable subject matter.

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11. With respect to claim 15, the claim limitations are deemed allowable over the prior art of record as the prior art neither anticipates nor renders obvious at least the combination with the inclusion in the claims of "determining the binary values in the first subset that may be rounded down without violating the performance constraint, thereby forming the second subset."

- 12. Claim 16 is allowed as being dependent upon, and thus incorporating therein, the allowable subject matter of the respective parent claims.
- 13. Claims 17-20 are allowed as overcoming the objections stated in the previous

 Office Action and being dependent upon, and thus incorporating therein, the allowable subject matter of the respective parent claims.
- 14. With respect to claim 21, the claim limitations are deemed allowable over the prior art of record as the prior art neither anticipates nor renders obvious at least the combination with the inclusion in the claims wherein "the integer program modeling a data placement problem which seeks to minimize a cost of placing data objects onto nodes of a distributed storage system while meeting a performance requirement for a workload."
- 15. Claims 22-27 are allowed as being dependent upon, and thus incorporating therein, the allowable subject matter of the respective parent claims.

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Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Golden whose telephone number is 571-272-5628. The examiner can normally be reached on Monday-Friday, 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on 571-272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James R. Golden Patent Examiner Art Unit 2187

June 2, 2006

Brian R. Peugh Primar Examiner